



Innovative Software Tools Measure Behavioral Alertness

Johnson Space Center

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NASA Technology

- ◆ For astronauts living in space, getting adequate rest is a challenge due to erratic schedules, microgravity-related ailments, and disrupted circadian rhythms
- ◆ The Psychomotor Vigilance Task (PVT), a 10-minute test which helps ascertain levels of fatigue, is too time-consuming of a process for busy astronauts



Technology Transfer

- ◆ Pulsar Informatics helped shorten the PVT and developed software for the test that is now used on the International Space Station
- ◆ The company commercialized the software, which is now used by companies and government agencies to monitor personnel fatigue

Benefits

- ◆ Trucking companies and commercial airlines use the test to help prevent accidents caused by driver and pilot fatigue
- ◆ Since the NASA collaboration, the number of full-time engineers and computer developers has grown from 3 to 24, and revenues have grown 75 percent every year